

Application Number 10/625,100

Filing Date 07-22-2003

Application Type: Utility

Examiner: Ton, Thaian N

Group Art Unit 1632

Class/Sub-Class 436/366

Publication No"US2005-0019907 A1

Publication Date 01-27-2005

Inventor Santiago Munne

Address of inventor: 229 Madison Str. Apt. 2, Hoboken, NJ-07030. Tel 201-3868962

Title: Obtaining normal disomic stem cells from chromosomally abnormal embryos

Clean Copy of Claims: Cancel Claims 1 to 4 and replace with Claims 5,6,7,8

Claim 5) I claim a disomic cell line derived from trisomic embryos.

Claim 6) I claim a stem line derived from said disomic cell lines of claim 1.

Claim 7) I claim a method of producing disomic cell lines consisting of the steps of:

- a) culturing trisomic embryos onto mouse feeder cells consisting of mouse embryonic fibroblast cells (ATCC-STO) said mouse embryonic fibroblast cells having been previously mitotically inactivated by mitocimin C in gelatin-tissue culture dishes; and,
- b) maintaining said mouse feeder cells using Dulbecco's Modified Eagle Medium (DMEM) without sodium pyruvate, glucose 4500 mgL⁻¹ supplemented with 20% fetal bovine serum, 0.1 mM -mercaptoethanol, 1% non-essential amino acids, 1 mM L-glutamine, 50 units ml L⁻¹ penicillin; and,
- c) supplementing said medium with human recombinant Leukemia Inhibitory factor at 2000 units mL⁻¹ and bFGF 4 ng/ml; and,
- d) culturing said embryos in said medium until day 12; and,
- e) fixing and analyzing by FISH said embryonic cell lines, and identifying and isolating disomic cell lines within said embryonic cell lines wherein disomic cell lines are produced.

Claim 8) I claim a method of claim 3 wherein stem cell lines are isolated from said disomic cell lines.